



[X] 3. No explanation of relevance is necessary for documents in the English language (see reply to Comments 67 and 68 in the preamble to the final rules; 1135 OG 13 at 20).

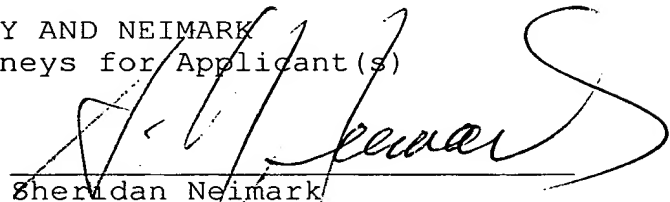
[ ] 4. Other information being provided for the examiner's consideration follows:

5. In accordance with 37 CFR §§1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant(s) reserves the right to prove that the date of publication is in fact different.

Respectfully submitted,

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OCT 31 2001 (use as many sheets as necessary)

Sheet	1	of	2
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**Complete if Known**

<b>Application Number</b>	09/917,837
<b>Filing Date</b>	July 31, 2001
<b>First Named Inventor</b>	KARNIN et al.
<b>Group Art Unit</b>	2681
<b>Examiner Name</b>	
<b>Attorney Docket Number</b>	KARNIN=1

## U.S. PATENT DOCUMENTS

[illegible]

**FOREIGN PATENT DOCUMENTS**

[illegible]

Examiner  
Signature

Date  
Considered

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO

Complete if Known

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2

of 2

Application Number

Filing Date

First Named Inventor

Group Art Unit

Examiner Name

Attorney Docket Number

## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	AI	DUEL-HALLEN, "A Family of Multiuser Decision-Feedback Detectors for Asynchronous Code-Division Multiple-Access Channels", <u>IEEE Transactions on Communications</u> , (1995), vol. 43, No. 2/3/4, pp. 421-434	
	AJ	KLEIN et al., "Zero Forcing and Minimum Mean-Square-Error Equalization for Multiuser Detection in Code-Division Multiple-Access Channels", <u>IEEE Transactions on Communications</u> , (1996), vol. 45, No. 2, pp. 276-287	
	AK	GIALLORENZI et al., "Decision Feedback Multituser Receivers for Asynchronous CDMA Systems", (1993), pp. 1677-1682	
	AL	DIVSALAR et al., "Improved CDMA Performance Using Parallel Interference Cancellation", <u>IEEE Transactions on Communications</u> , (1994), pp. 911-917	
	AM	DUEL-HALLEN, "Decorrelating Decision feedback Multiuser Detector for Synchronous Code-Division Multiple-Access Channel	
	AN	MOSHAHI, "Multi-User Detection for DS-CDMA Communications", <u>IEEE Communications Magazine</u> , (1996), pp. 124-136	
	AO	LUPAS et al., "Linear Multiuser Detectors for Synchronous Code-Division Multiple-Access Channels", <u>IEEE Transactions on Communications</u> , (1989), vol. 35, No. 1, pp. 123-136	
	AP	VERDU, "Minimum Probability of Error for Asynchronous Gaussian Multiple-Access Channels", <u>IEEE Transactions on Communications</u> , (1986), vol. IT-32, No. 1, pp. 85-89	
	AQ	GOLUB et al., "Matrix Computations", <u>Johns Hopkins Series in Mathematical Sciences</u> , (1996), pp. 222-229	
	AR	Presentation: "CDMA-Multiuser Detection", By Jacob Sheinvald (2000)	
	AS	SHEINVALD et al., "Improving CDMA Multi-user Detection by Constraining the Soft Decisions", <u>IBM Research Lab</u> , (2000), pp. 1-22	

Examiner  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.